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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/560,424

05/30/2006

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EXAMINER

ADAMOS, THEODORE V

ART UNIT

PAPER NUMBER

3635

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/560,424	<b>Applicant(s)</b> SKENDZIC ET AL.	
	<b>Examiner</b> THEODORE ADAMOS	<b>Art Unit</b> 3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 December 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

This is a second non-final office action on the merits for application serial number 10/560,424 filed May 30th, 2006.

- Claims 1-5 are pending
- Claims 1-5 are examined.

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 53 and 54. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

2. The disclosure is objected to because of the following informalities: line 4 of page 14 recites "rod anchors (8) being pooled through holes" when it is recommended to read

Art Unit: 3635

as --rod anchors (8) being pulled through holes--. Applicant is reminded to peruse the specification for other minor informalities.

Appropriate correction is required.

### ***Claim Objections***

3. Claims 1 and 3 are objected to because of the following informalities: claim 1 recites "them the two layers" in line 7 and should be rewritten; the claim limitations at the beginning of claim 3 define a wall panel which is capable of bearing a rigid floor unit, where the rigid floor unit structure is not a definite claim limitation, however the claim limitations later in claim 3 recite a connection between the rigid floor unit and the wall panel. For examining purposes, the rigid floor unit structure is considered to be a claimed limitation. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

4. The 35 U.S.C. 112, second paragraph rejections of the prior office action have been successfully traversed

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**7. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Amormino (U.S. Patent 4,669,240) in view of Konopka (U.S. Publication 2004/0003565).**

8. Regarding claim 1, Amormino discloses a composite wall panel comprising:

- two concrete layers (#15 and #19; figure 6),
- both layers being reinforced substantially with a steel wire mesh layer (longitudinal and lateral rods #17 form a mesh)
- the two layers being interconnected continuously throughout an entire length of the panel by at least two strip webs (#25) so that a gap is formed between the two layers
- the gap being filled by a layer of thermo-insulation (#29) inwardly adhered to an inner concrete layer of the two layers, with a rest of the gap used as a separate layer of air ventilation (#33)
- the strip webs being anchored to both of the concrete layers (figure 6) and comprising steel rod anchors (#23) and also additional longitudinal reinforcing bars (multiple steel rod anchors #23 are used within the panel of figure 7 which

Art Unit: 3635

could be considered additional longitudinal reinforcement rods together with steel rod anchors)

However, Amormino does not disclose two steel wire mesh layers within each concrete layer.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used two steel wire mesh layers within each concrete layer instead of one as disclosed in Amormino, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. It would have also been obvious to a person of ordinary skill in the art to have used multiple steel wire mesh layers in each concrete layer in order to provide each concrete layer with the proper tensile strength needed for each application of the panel. Please note that in the instant application, page 13, line 24 - page 14, line 2, applicant has not disclosed any criticality for the claimed limitations.

Amormino also does not disclose the short steel rod anchors placed a distance between the two steel wire mesh layers with additional longitudinal reinforcing bars conducted through it as well.

It would have also been obvious to a person of ordinary skill in the art at the time the invention was made that the short steel rod anchors and longitudinal rods of Amormino would be positioned a distance between the two steel wire mesh layers when a second steel wire mesh layer would be placed in

Art Unit: 3635

each concrete layer since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Please note that in the instant application, page 14, lines 2-10, applicant has not disclosed any criticality for the claimed limitations.

Amormino also does not disclose strip webs being anchored to both concrete layers through a plurality of welds and having arranged steel loops containing holes into which the steel rod anchors are inserted.

Konopka discloses an insulated load bearing building wall which comprises of webs #26 with loops #86 on either end of the wall tie into which a rod anchor #24 is inserted into; figure 3A. The wall ties are also secured to the rod anchors by conventional welding or by some other suitable means for fastening these components together (paragraph 29 | lines 15-18).

It would have been obvious to a person of ordinary skill in the art at the time the invention was created to have used the webs comprising loops that are welded to rod anchors as disclosed in Konopka within the wall panel of Amormino in order to be able to alter the amount of web elements used within the wall to alter the strength characteristics of the wall for each application of the invention where more web elements could be added to strengthen the wall panel or less web elements could be added to save on the cost of manufacture.

**9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Amormino in view of Konopka as applied to claim 1 above, and further in view of Altizer (U.S. Patent 4,674,250).**

10. Regarding claim 2, Amormino in view of Konopka disclose the claimed invention, including a support for bearing roof flat soffit units (Amormino; figure 1 discloses roof panels #85 supported upon wall panels #11), except for an inbuilt steel tube protruding near the two concrete layers.

Altizer discloses wall panels #11 comprising a steel tube #20 protruding from the top of the wall panel where the tube is anchored using conventional fastening methods such as welding, riveting, etc. (col. 3 | lines 57-60). The tube also comprises two bolts #38 extending upwardly from the top surface of the tube upon which a soffit plate #63 of the flat soffit unit #12 slipped over through two holes through which the fasteners are inserted into and fixed by nuts.

It would have been obvious to a person of ordinary skill in the art at the time the invention was created to have included the steel tubes used to support roof soffit units, as disclosed in Altizer, within the wall panels of Amormino in view of Konopka in order to strengthen the connection between the wall panels and roof soffit units as well as provide a stronger support on the wall panel where the roof soffit unit is supported.

The functional recitation “to gradually transmit roof load from the steel tube to both of the two concrete layers centrically, without considerable stress concentration” has been carefully considered but deemed not to impose any structural limitations on the claims distinguishable over the



Art Unit: 3635

Referenced device which is capable of being used as claimed if one desired to do so. MPEP 2112.

**11. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Amormino in view of Konopka in further view of Altizer as applied to claim 2 above, and further in view of Berney et al. (U.S. Patent 3,336,709).**

12. Regarding claim 3, Amormino in view of Konopka in further view of Altizer disclose the claimed invention, including a support for bearing a rigid floor unit inside of a horizontal groove formed along an interrupt of the inner concrete layer (figure 1 of Amormino depicts a groove positioned within the wall panel through which a floor unit #81 is supported on and overlaps the webs of the wall panel), except for another inbuilt steel tube anchored to both of the two concrete layers.

Berney et al. discloses a building panel wall which uses inbuilt steel tubes #34 on its upper and lower edges to mount a concrete floor unit #21 to a wall panel #24 using bolts #36 inserted into a T-slot #35 in the tube #34 and secured to an angle bracket #38. The angle bracket is then secured to the web #29 of the wall panel #24 using a bolt #40 and nut #41 so that the tube #34 is placed at a right angle to the web #29 of the wall panel #24.

It would have been obvious to a person of ordinary skill in the art at the time the invention was created to have used steel tubes as disclosed in Berney et al. within the floor unit placed within a groove in the wall panel of Amormino in view of Konopka in

Art Unit: 3635

further view of Altizer in order to strengthen the connection between the floor unit and wall panel and allow the building to be able to resist greater forces.

In accordance to MPEP 2113, the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight. Please note that even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product, i.e. the wall panel, does not depend on its method of production, i.e. pouring concrete within the groove of the wall panel. *In re Thorpe, 227 USPQ 964, 966 (Federal Circuit 1985).*

However, Amormino in view of Konopka in further view of Altizer and Berney et al. do not disclose the connection providing a perfect straight connecting edge on both upper and lower sides along a joint. Berney et al. does depict in figure 2 a perfect straight connection edge between the upper and lower edges of where the floor unit is connected to the wall panel. Therefore, it would have been obvious to a person of ordinary skill in the art to provide a perfect straight connecting edge on both upper and lower sides along a joint within the structure of in view of Konopka in further view of Altizer and Berney et al. in order to a secure the floor unit in a proper horizontal position.

**13. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amormino.**

Art Unit: 3635

14. Regarding claim 4, Amormino discloses a building construction of composite load-bearing vertical wall-panels (#11; figure 1) and composite roof-ceiling units (#85), said building comprising:

- wall panels aligned and rigidly fixed as cantilevers to strip precise foundations (#43) with longitudinal sockets (#44) arranged along a perimeter of the building (figure 1), and each wall panel including a cast concrete inner layer (#15) and a cast concrete outer layer (#19), and a layer of mesh reinforcement (#17) placed in each of the inner layer and in the outer layer, on opposites sides of an insulation layer (#29) and an air layer (#33),
- widths of the wall panels exactly coinciding with widths of floor ceiling and floor units (#77) to ensure precise coincidence of connecting details (it would have been obvious to a person of ordinary skill in the art to make the panel dimensions similar to the other elements of the structure in order to keep conformity between the structure elements), so that the building having all flat inner surfaces (figure 1), avoids a need for either columns or beams (figure 1 depicts a structure which is erected using wall panels with no assistance of columns or beams).

However, Amormino does not disclose two interspaced layers of mesh reinforcement placed in each of the inner layer and in the outer layer.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used two steel wire mesh layers within each concrete layer instead of one as disclosed in Amormino, since it has been held that mere duplication of the essential working parts of a device involves

Art Unit: 3635

only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. It would have also been obvious to a person of ordinary skill in the art to have used multiple steel wire mesh layers in each concrete layer in order to provide each concrete layer with the proper tensile strength needed for each application of the panel. Please note that in the instant application, page 13, line 24 - page 14, line 2, applicant has not disclosed any criticality for the claimed limitations.

15. Regarding claim 5, Amormino discloses the wall panels are mounted and rigidly fixed temporarily as cantilevers (the wall panels are temporarily fixed since they can be taken down or broken apart at anytime) attached with tops of the walls panels to a stiff horizontal plane formed of roof-ceiling plates (the horizontal roof of figure 1 is made of roof panels #85) interconnected along adjacent edges to be laterally restrained against sideways forces by joining endplates of roof ceiling plates to the wall panels (the end of the roof panel #85 lies within an opening formed within the wall panel so that it lies above the inner concrete layer and layer of insulation and also so that it is connected to the outer concrete layer #19 of the wall panel to restrain the roof panel from sideways forces).

### ***Response to Arguments***

16. Applicant's arguments with respect to claims 1-5 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Regarding the web of the wall panel: Haeussler (U.S. Patent 3,757,482), Haeussler (U.S. Patent 4,359,848), Haeussler (U.S. Patent 3,996,713), Ritter et al. (U.S. Publication 2003/0029107), Tadros et al. (U.S. Patent 5,440,845), Barrett (U.S. Patent 4,649,682).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THEODORE ADAMOS whose telephone number is (571)270-1166. The examiner can normally be reached on Mon-Fri 7:30a.m. to 5:00 p.m. with the first Friday of the bi-week off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on (571)272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Richard E. Chilcot, Jr./  
Supervisory Patent Examiner, Art Unit 3635

/TA/  
3635